Understanding Technical Language Use in Competitive League of Legends

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INTRODUCTION

Introduction

League of Legends (LoL) is an online competitive strategy game that necessitates a constant sharing of information between five teammates. The game is the largest part of the esports industry with more than 100 million monthly players. Professional "gamers" play in competitive matches that last anywhere from twenty minutes to an hour and require constant communication of details and strategy between the five teammates. This study was done to better understand the role of technical language within competitive LoL teams. What tools do they utilize to communicate in this high stress environment? What does their 'technical' communication look like when it's broken down?

Purpose

My research focused on the language the University of Minnesota LoL team used during their play.

My goals for understanding the use of technical language were:

- *Qualitative data:* Interviewing players, coaches, and managers to understand their perspective on communicating in this competitive environment.
- *Quantitative data:* A statistical analyses of the language used by the University of Minnesota LoL team that includes data like: number of abbreviations, syllable counts, and the number of words spoken.
- *Understanding purpose:* Why does this environment necessitate the use of technical language?

Research Question

How is technical language used in competitive League of Legends?

METHODS

Collecting Data

I collected data in two different ways. Analyzing recordings of the University of Minnesota LoL team's communication in scrimmages as well as conducting interviews of LoL players, coaches, and managers. The analysis of scrimmages looked for language such as jargon, words with connotative meanings, abbreviations, and words that are used to expound technical ideas. Then I broke that language down to see what types of techniques are utilized by players to make their communication more effective. The quantitative data was analyzed in order to understand the efficiency of communication by the length of communication, and percentages of words that are abbreviated. I interviewed players, coaches, and managers within the competitive LoL college scene because there is little academic research behind how these teams communicate, it's important to hear from their perspective.

Categories of Terms for Quantitative Data

- Technical Terms and phrases that communicate strategy
- Champion Names (Each champion is unique and it requires weeks of time to master even one of them.)
- Item names (items are an in-game statistical bonus players must understand.)

Figure 1. Word Cloud of Technical Terms used in University of Minnesota LoL team scrimmages.

RESULTS

Quantitative Data

The data collected from listening to scrimmages showed a few interesting things. (See Table 1.)

- 471 unique technical terms, phrases, champion names, and items were found.
- More than half of language (55%) used was abbreviated (Part of why these teams sound like they talk in code)
- Only 5.3% of the language used was over 1 word long.
- 70 of the 175 technical terms and phrases used were abbreviated.
- Figure 1 shows some of the vocabulary used.

Type	Total	Abbreviations	# of words in total phrase	Single Syllable
Terms +	175 (37%)	70 (40%)	16 (9%)	77 (44%)
Champion Names	143 (30%)	67 (47%)	0 (0%)	89 (62%)
Items	153 (33%)	124 (81%)	9 (5.9%)	22 (14%)
Total	471	261 (55%)	25 (5.3%)	188 (40%)

Table 1. Quantitative data from the University of Minnesota League of Legends team scrimmages.

Qualitative Data

"I don't think that it's more important than any other sport or any other team environment, however, I do think in the medium of esports and the medium of LoL specifically, all you really have when you enter the game is communication. If you think about football and a team of football players, you're not able to communicate shared information across the field. In esports it's really only you and your four teammates in a voice room. Communication is all you have to further your game plan or execute something." – *Geoffrey Wang, Former Coach of Harrisburg University LoL team.*

"Not being able to communicate what you're saying kind of damages the environment" – *Anders Ching, Competitive LoL Player*

"The Purpose is to just get the most amount of information across with the shortest amount of effort because it's such a high-paced game you can't afford to say a 2-minute rant"– *Sam Kuznia, Competitive LoL player for UMN.*

"It's like a secret language with your friends" – *Anders Ching*

"One of the most important things it does is concisely convey complex ideas in a short period of time which is something that is essential for in-game communication." – *Geoffrey Wang*

CONCLUSION

Discussion

There were many interesting discoveries from completing this research.

- The purpose of technical language in competitive LoL is to keep the information flow at the same pace as the game.
- Bowers, Braun & Morgan (1997) pointed that cooperation alone is not sufficient in creating an effective team.
- Technical language used by competitive college LoL players requires brevity without loss of context or intent.
- Research by Eccles and Tenebaum (2004) explains how an expert team is more than a team of experts. The study fills out the claim by exploring the specialized vocabulary.

Implications

Professional and college LoL teams should review and understand their own use of language within their teams. Esports are a new enterprise of the 21st century and this research shows how necessary it is for technical language to be used between all teammates in this medium.

Further Inquiry

- Can competitive gaming be used as an educational tool to teach students how to communicate in the professional world?
- Does this study support theories on gamification in the modern world? How powerful are games for teaching?
- How will the medium of esports evolve? Will communication change as we move into virtual reality?

RESOURCES & ACKNOWLEDGEMENTS

Resources

(G. Wang , personal communication, April 10th)

(A. Ching , personal communication, April 10th)

(G. Wang , personal communication, April 11th)

Eccles, D. W., & Tenenbaum, G. (2004). Why an Expert Team Is More than a Team of Experts: A Social-Cognitive Conceptualization of Team Coordination and Communication in Sport. Journal of Sport and Exercise Psychology

Bowers, C. A., Braun, C. C., & Morgan, B. B., Jr. (1997). Team workload: Its meaning and measurement. In M. T. Brannick, E. Salas, & C. Prince (Eds.), Series in applied psychology. Team performance assessment and measurement: Theory, methods, and applications (pp. 85-108).

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